

BACHELOR OF VOCATION
Automotive Manufacturing
Subject: Operations Research and Industrial Management
Subject Code: BBME-313
Semester: Fifth
January 2021
Theory (External): 70 Marks
Time: 03 Hours

Instructions to the Students

1. This Question paper consists of two Sections. All sections are compulsory.
2. Section A comprises 10 questions of objective type in nature. All questions are compulsory. Each question carries 2 marks.
3. Section B comprises 8 essay type questions out of which students need to do any 5. Each question carries 10 marks.
4. Read the questions carefully and write the answers in the answer sheets provided.
5. Do not write anything on the question paper.
6. Wherever necessary, the diagram drawn should be neat and properly labelled

Roll Number											

SECTION –A (SHORT/OBJECTIVE TYPE QUESTIONS)
(10x2=20 Marks)

- A. What is Operations Research? Explain feature of O.R.
- B. Define PERT.
- C. What is KANBAN?
- D. Define VSM?
- E. Explain leadership?
- F. Define degeneracy transportation problem.
- G. What is industrial psychology?
- H. Explain CPM.
- I. Define inventory control.
- J. Explain budget?

SECTION –B (ESSAY TYPE QUESTIONS)

(5x10=50 Marks)

1. Define operation Research. Give the historical development of OR.
2. What are the situations when O.R. techniques will be applicable?
3. Write the steps involved in the North-West Corner Rule for finding an initial basic feasible solution to a transportation problem?
4. Explain the different methods of training available to employees in an organisation.
5. Explain the different techniques of inventory control management.
6. Write short note on:
 - a) Game theory
 - b) Markov chain
7. What do you mean by LPP? Explain simplex method of LPP in detail.
8. Use the Hungarian method to solve the following assignment problem:

	J1	J2	J3	J4
M1	10	9	7	8
M2	5	8	7	7
M3	5	4	6	5
M4	2	3	4	5

*****END OF PAPER*****